

Claims

1. In a harvesting machine having a crop conveying element for delivering crop to further crop processing components of the harvesting machine, a power source, a driveline coupled between said power source and said crop conveying element and containing an overload clutch, a crop jam detection arrangement for the detection of a crop jam in the harvesting machine, comprising: said overload clutch including torque transfer elements which generate acoustic and/or mechanical vibrations when said clutch experiences a torque in excess of a pre-determined limit value; a sensor located for sensing said vibrations and generating an input signal representative of said vibrations; and a control arrangement coupled to said sensor for receiving said input signal and operable for processing said input signal and for sending a control signal when said input signal rises above a threshold representative of a crop jam condition.
2. The harvesting machine, as defined in claim 1, wherein said sensor is a knock sensor.
3. The harvesting machine, as defined in claim 2, wherein said harvesting machine is a forage harvester and includes a shear bar and a cutter knife drum rotating so as to cooperate with said shear bar to cut crop, delivered across the shear bar, into small pieces; and said knock sensor being mounted adjacent said shear bar and operable for sensing engagement between knives carried by said cutter knife drum and said shear bar.
4. The harvesting machine, as defined in claim 1, wherein said harvesting machine is a forage harvester; said forage harvester including a crop take-up arrangement mounted to a forward end of said forage harvester; said crop conveyor being a component of said crop take-up arrangement; and said sensor being located on said forage harvester in a location remote from said crop conveyor.
5. The harvesting machine, as defined in claim 1, wherein said overload clutch is a cam-controlled clutch.